

WHAT IS CLAIMED IS:

1. A peptide having affinity to gp120 represented by formula (1):

H-A1-A2-A3-A4-A5-R

(in the formula,

H means hydrogen,

A1 is aspartic acid, lysine, valine, glutamic acid, glycine, asparagine, or tyrosine residue,

A2 is valine, aspartic acid, tryptophan, lysine, phenylalanine, isoleucine, leucine, or tyrosine residue,

A3 is lysine, valine, aspartic acid, arginine, alanine, or tryptophan residue,

A4 is alanine, tryptophan, or glycine residue

A5 is glycine, alanine, valine, leucine, isoleucine, serine, threonine, methionine, asparagine, glutamine, histidine, lysine, arginine, phenylalanine, tryptophan, proline, or tyrosine residue,

R is OH derived from carboxyl group or NH₂ derived from acid amide group).

2. A peptide having affinity to gp120 represented by formula (2): A1'-A2-A3-A4-A5-R

(in the formula,

A1' means aspartic acid, lysine, valine, glutamic acid, glycine, asparagine, or tyrosine residue, or polypeptide residue that an arbitrary amino acid stood in line in N-terminal side from this amino acid

A2, A3, A4, A5 and R has the same meaning as the above).

Sub-c39
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3. A peptide having affinity to gp120 represented by formula (3):

H-A1-A2-A3-A4-A5'-R'

(in the formula,

A5' means: glycine, alanine, valine, leucine, isoleucine, serine, threonine, methionine, asparagine, glutamine, histidine, lysine, arginine, phenylalanine, tryptophan, proline, or tyrosine residue, or polypeptide residue that an arbitrary amino acid stood in line in C-terminal side from this amino acid, H, A1, A2, A3 and A4 is same meaning as the above).

4. A peptide having affinity to gp120 characterized in having amino acid sequence of A1-A2-A3-A4-A5.

5. A peptide having affinity to gp120 represented by Formula (4): H-a1-a2-a3-a4-a5-R

(In the formula,

H means hydrogen,

a1 is tyrosine, arginine, phenylalanine, glycine, tryptophan, histidine, or aspartic acid residue,

a2 is arginine, tyrosine, tryptophan, alanine, valine, glutamine, histidine, or lysine residue,

a3 is lysine, tyrosine, arginine, glutamic acid, methionine, or tryptophan residue,

a4 is glycine, alanine, valine, leucine, isoleucine, serine, threonine, methionine, asparagine, glutamine, histidine, lysine, arginine, phenylalanine, or tryptophan

residue

a5 is glycine, alanine, valine, leucine, isoleucine, serine, threonine, methionine, asparagine, glutamine, histidine, lysine, arginine, phenylalanine, tyrosine, or tryptophan residue,

R is OH derived from carboxyl group or NH₂ derived from acid amide group).

6. A peptide having affinity to gp120 represented by Formula (5): a1'-a2-a3-a4-a5-R.

(In the formula,

a1' means tyrosine, arginine, phenylalanine, glycine, tryptophan, histidine, or aspartic acid residue, or polypeptide residue that an arbitrary amino acid stood in line in N-terminal side from this amino acid,

a2, a3, a4, a5 and R have the same meaning as above).

7. A peptide having affinity to gp120 represented by Formula (6): H-a1-a2-a3-a4-a5'

(In the formula,

a5' is glycine, alanine, valine, leucine, isoleucine, serine, threonine, methionine, asparagine, glutamine, histidine, lysine, arginine, phenylalanine, tyrosine, or tryptophan residue, or polypeptide residue that an arbitrary amino acid stood in line in C-terminal side from this amino acid,

H, a1, a2, a3, and a4 have the same meaning as above).

8. A peptide having affinity to gp120 characterized in having amino acid sequence of

a1-a2-a3-a4-a5.

9. A compound which macromolecule compound having a functional group and/or medicine bound to the peptide according to any of claims 1-8, or a pharmaceutically acceptable salt thereof.

10. A compound according to claim 9 which is both used for absorbing and removing the carrier, or a pharmaceutically acceptable salt thereof.

11. Virus agglutinin test medicine using the peptide according to any of claims 1-8 or the kit including this test medicine.